



MEMORANDUM
DEPARTMENT OF TRANSPORTATION

TO: Regional Bridge Management Engineer, Region # ____
Regional Structures Engineer, Region # ____

FROM: T.J. Moon, Structures Division, 0600 *T.J. Moon*

SUBJECT: **Definition Changes for the Vulnerability Manuals
and Bridge Safety Assurance Computer Override
Evaluation Form**

DATE: October 4, 2001

A draft proposal was prepared through the BSA Committee and distributed to the Regions for comments August 3, 2001. Comments were received and reviewed. The two proposed actions are hereby adopted with changes reflective of comments received.

1). The attached form shall be used when the Region overrides any bridge vulnerability rating generated from the vulnerability manuals. The procedures in the manuals were developed after study and discussions, but with limited tested results. In addition, the manuals attempt to cover the entire bridge population, however, certain bridge characteristics may not accurately fit the models. The explanation for the Regional override could be as simple as "the characteristics of this bridge do not fit the procedures in the manual because of ..." or as complicated as a full hydraulic assessment.

2). The Vulnerability Rating Scale definitions for 1 and 2 shall be changed to read as follows:

a). Safety Program Watch

This rating designates a vulnerability to failure resulting from loads or events that may occur in the next few years. Corrective or mitigating action, enhanced inspection or other appropriate safety action, such as placing on a flood watch, shall be taken. If corrective or mitigating action is not immediately taken, placing the bridge on the current 5-Year Capital Program along with appropriate interim safety action such as continued monitoring or traffic restrictions shall be considered.

b). Safety Program Alert

This rating designates a vulnerability to failure resulting from loads or events that may occur but are not likely in the next few years. Remedial work to reduce the vulnerability or enhanced monitoring is not an immediate priority, but may be needed in the near future. Placing the bridge on the Capital Program should be considered.

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As was mentioned in the August 3, memorandum, the flagging system through our Bridge Inspection Operation and Bridge Maintenance Program is the proper way that immediate bridge safety needs are identified. The previous definitions for 1 and 2 required immediate action which, has not proved to be necessary based solely on the BSA vulnerability rating.

When the BSA Committee makes its final report there will be other changes and when those are decided upon and implemented revisions to the Manuals will be made.

TJM/ks
Attachment
vulman2.wpd

cc: J.M. O'Connell, Structures Division, 0600
G.A. Christian, Structures Division, 0600
R.C. Holt, Structures Division, 0600
K.R. Whittemore, Structures Division, 0600
S. Lagace, Structures Division, 0600
M. Sullivan, Structures Division, 0600

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CARRIED: _____ CROSSED: _____

Does the Assessment Engineer's Evaluation agree with the values above (YES/NO) _____

Vulnerability Classification _____ **Vulnerability Rating** _____

Regional Bridge Management or
Regional Structures Engineer
Concurrence

(Name)

(Title)

(Date)